Appendix 1 [posted as supplied by author]

Search strategies

PubMed (NLM), June, 2013

("Pedophilia" [Mesh] OR "Child Abuse, Sexual" [Mesh] OR ("Sex Offenses" [Mesh] AND (child*[tiab] OR adolesc*[tiab])) OR "Incest" [Mesh] OR pedophil*[tiab] OR paedophil* [tiab] OR "child sexual abuse" [tiab] OR "child sex abuse" [tiab] OR incest* [tiab] OR pederast* [tiab]) AND ("Androgen Antagonists" [Mesh] OR "Gonadotropin-Releasing Hormone/agonists" [Mesh] OR "Pedophilia/drug therapy" [Mesh] OR "Pedophilia/therapy" [Mesh] OR "Serotonin Uptake Inhibitors/therapeutic use" [Mesh] OR "Sexual Behavior/ drug effects" [Mesh] OR "Sexual Behavior/therapy" [Mesh] OR "Sexual Behavior/psychology" [Mesh] OR "Pedophilia/psychology" [Mesh] OR "Sexual Dysfunctions, Psychological/drug therapy" [Mesh] OR "Sexual Dysfunctions, Psychological/psychology" [Mesh] OR "Sexual Dysfunctions, Psychological/therapy" [Mesh] OR "Sex Offenses/ prevention and control" [Mesh] OR "Child Abuse, Sexual/prevention and control" [Mesh] OR "Behavior Therapy" [Mesh] OR "Socioenvironmental Therapy" [Mesh] OR "Psychotherapy" [Mesh:NoExp] OR antiandrogen*[tiab] OR LHRH agonist*[tiab] OR serotonin uptake inhibitor*[tiab] OR "pharmacological treatment"[tiab] OR psychotherap*[tiab] OR psychol*[tiab] OR cognitive[tiab] OR behavior*[tiab] OR behaviour*[tiab] OR CBT[tiab] OR systemic[tiab] OR multisystemic[tiab]) AND ("treatment outcome" [mesh] OR "Recurrence" [Mesh] OR "Crime/legislation and jurisprudence" [Mesh] OR "Crime/prevention and control" [Mesh] OR recurrence[tiab] OR conviction[tiab] OR recidivism[tiab] OR relapse[tiab] OR rehabilitation[tiab] OR "Child Abuse, Sexual/prevention and control" [Mesh] OR "Treatment failure" [Mesh]) AND ("clinical trial" [Publication Type] OR "comparative study" [Publication Type] OR "meta analysis" [Publication Type] OR "multicenter study" [Publication Type] OR "randomized controlled trial" [Publication Type] OR "cohort studies"[mesh] OR "cohort"[title] OR "observational"[ti] OR "random"[ti] OR "randomized"[ti] OR "randomly" [tiab] OR "review" [pt] OR prevent*[ti] OR "Case-Control Studies" [mesh] OR Systematic[sb])

Limits: English, Danish, Norwegian, Swedish

PsycInfo (EBSCO), June, 2013

((DE "Pedophilia") or (DE "Sexual Abuse") or ((DE "Rape") AND ((TX child*) or (TX adolesc*))) or (TX child molest*) or (DE "Incest") or (TX pedophil*) or (TX paedophil*) or (TX child sexual abuse*) or (TX child sex abuse*) or (TX incest*) or (TX pederast*)) AND ((DE "Antiandrogens") or (DE "Adolescent Psychotherapy") or (DE "Analytical Psychotherapy") or (DE "Behavior Therapy") or (DE "Aversion Therapy") or (DE "Dialectical Behavior Therapy") or (DE "Cognitive Behavior Therapy") or (DE "Group Psychotherapy") or (DE "Therapeutic Community") or (DE "Individual Psychotherapy") or (DE "Insight Therapy") or (DE "Integrative Psychotherapy") or (DE "Interpersonal Psychotherapy") or (DE "Psychoanalysis") or (DE "Psychodynamic Psychotherapy") or (DE "Cognitive Therapy") or (DE "Male Castration") or (TX antiandrogen*) or

(TX LHRH agonist*) or (TX serotonin uptake inhibitor*) or (TX pharmacological treatment) or (TX psychotherap*) or (TX psychol*) or (TX cognitive) or (TX behavior*) or (TX behaviour*) or (TX CBT) or (TX systemic) or (TX multisystemic) or (TX rehab*) or (DE "criminal rehabilitation")) AND ((DE "Treatment Outcomes") or (DE "Psychotherapeutic Outcomes") or (DE "Relapse Disorders") or (DE "Relapse Prevention") or (DE "Treatment Effectiveness Evaluation") or (DE "Criminal Conviction") or (DE "Criminal Behavior") or (TX relapse) or (TX rehabilitation) or (TX recurrence) or (TX conviction) or (TX recidivism) OR (DE "Rehabilitation") or (DE "Criminal Rehabilitation") or (DE "Relapse Prevention")) AND ((TX cohort) or (TX observational) or (TX random) or (TX randomized) or (TX randomised) or (TX randomly) or (TI prevent*) or (DE treatment effectiveness evaluation) OR (DE Program Evaluation) OR (DE relapse prevention) OR (MR longitudinal study) OR (MR followup study) OR (KW systematic review) OR (TX systematic review)) Limits: English, Danish, Norwegian, Swedish

National Criminal Justice Reference Service Abstracts (EBSCO), June, 2013 ((SU "Child sexual abuse") or (SU "Incest") or (SU "Child molesters") or (SU "statutory rape") or ((SU "Rape") AND ((TX child*) or (TX adolesc*))) or (TX child molest*) or (DE "Incest") or (TX pedophil*) or (TX paedophil*) or (TX child sexual abuse*) or (TX child sex abuse*) or (TX incest*) or (TX pederast*)) AND ((SU "sex offender treatment") OR (SU "cognitive therapy") OR (SU "psychotherapy") OR (TX program*) OR (TX prevent*) OR (SU "controlled drugs") OR (SU "prescription drugs") OR (SU "castration of rapists") OR (SU "rehabilitation") OR (SU "rape prevention programs") OR (SU "inmate programs") OR (TX antiandrogen*) or (TX LHRH agonist*) or (TX serotonin uptake inhibitor*) or (TX pharmacological treatment) or (TX psychotherap*) or (TX psychol*) or (TX cognitive) or (TX behavior*) or (TX behaviour*) or (TX CBT) or (TX systemic) or (TX multisystemic) or (TX rehab*)) AND ((SU "recidivism") OR (SU "inmate health") OR (SU "convictions") OR (SU "arrest and apprehension") OR (TX relapse*) or (TX rehabilit*) or (TX recurren*) or (TX convict*) or (TX recidiv*)) AND ((TX cohort*) or (TX observation*) or (TX random) or (TX randomized) or (TX randomised) or (TX randomly) or (TI prevent*) OR (TX longitudinal) OR (SU "program evaluation") OR (SU "program design") OR (SU "Corrections effectiveness") OR (SU "Juvenile corrections effectiveness") OR (SU "treatment effectiveness") OR (SU "evaluation"))

Cochrane Library (Wiley), June, 2013

- #1 MeSH descriptor Pedophilia explode all trees
- #2 MeSH descriptor Child Abuse, Sexual explode all trees
- #3 MeSH descriptor Sex Offenses explode all trees
- #4 MeSH descriptor Incest explode all trees
- #5 (child*):ti,ab OR (adolesc*):ti,ab
- #6 (pedophil*):ti,ab OR (child sexual abuse):ti,ab OR (child sex abuse): ti,ab OR (incest*):ti,ab OR (pederast*):ti,ab
- #7 (#1 OR #2 OR (#3 AND #5) OR #4 OR #6)
- #8 MeSH descriptor Androgen Antagonists explode all trees

- #9 MeSH descriptor Gonadotropin-Releasing Hormone explode all trees with qualifier: AG
- #10 MeSH descriptor Pedophilia explode all trees with qualifiers: DT,TH,P
- #11 MeSH descriptor Serotonin Uptake Inhibitors explode all trees with qualifier: TU
- #12 MeSH descriptor Sexual Behavior explode all trees with qualifiers: DE,TH,P
- #13 MeSH descriptor Sexual Dysfunctions, Psychological explode all trees with qualifiers: DT,TH,P
- #14 MeSH descriptor Sex Offenses explode all trees with qualifier: PC
- #15 MeSH descriptor Child Abuse, Sexual explode all trees with qualifier: PC
- #16 MeSH descriptor Behavior Therapy explode all trees
- #17 MeSH descriptor Socioenvironmental Therapy explode all trees
- #18 MeSH descriptor Psychotherapy, this term only
- #19 (antiandrogen*):ti,ab OR (LHRH agonist*):ti,ab OR (serotonin uptake inhibitor*):ti,ab OR (pharmacological treatment):ti,ab OR (psychotherap*):ti,ab OR (psychol*):ti,ab OR (cognitive):ti,ab OR (behavior*):ti,ab OR (behaviour*): ti,ab OR (CBT):ti,ab OR (systemic):ti,ab OR (multisystemic):ti,ab
- #20 (#8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19)

#21 (#7 AND #20)

Campbell Library, June, 2013

pedophil* in All text or paedophil* in All text or child sexual abuse in All text or child sex abuse in All text or incest* in All text

Assessment of risk of bias: randomised controlled trials.

Minimum requirements for moderate risk of bias

- 1. Adequately executed randomisation process
- 2. Each treatment group included at least 20 individuals
- 3. Known confounding factors did not differ between groups at the outset of the study, or the statistical analysis had adjusted for possible differences between groups.

Minimum requirements for low risk of bias

Criteria 1 and 3 above and

- 4. Each treatment group included at least 50 individuals
- 5. Treatment was subject to quality control; for example, senior clinical staff closely supervised treatment provided by treatment staff through video recordings etc.

Assessment of risk of bias: prospective observational studies

Minimum requirements for moderate risk of bias

- 1. The contents of the interventions to be compared were clearly defined
- 2. Several known confounding factors had been identified at the outset of the study, and the statistical analysis had adjusted for possible differences between the groups
- 3. The groups were recruited in a way that minimised the risk for systematic error
- 4. Subjects in each group had been selected and diagnosed in a similar manner.

Minimum requirements for low risk of bias

Criteria 1-4 above and

- 5. Adequate statistical power, statistically significant data, or power analysis
- 6. Most of the known confounding factors had been identified at the outset of the study, and the statistical analysis had adjusted for any differences between the groups
- 7. Treatment was subject to quality control; for example, senior clinical staff closely supervised treatment provided by treatment staff through video recordings etc.

The GRADE system

We used the international evidence grading system GRADE. The GRADE level refers to the appraised strength of the collective body of scientific evidence and its capacity to reliably answer a specific question. For each outcome, ranking is based on overall assessment of study designs. Thereafter, evidence strength could be influenced by weakening or strengthening factors; risk of bias, inconsistency, indirectness, imprecision, risk of publication bias, effect size, and other aspects such as dose-response relationships.

Specifically for this project, we subtracted indirectness from the overall rating when only one study addressed a particular question, unless that study had a multicenter design. This was done because we could not rule out that other context and setting-dependent factors might have contributed to the result. Deductions were made for imprecision when the sample size was less than 50% of the calculated optimal information size. Deductions were also made for risk of bias, unless at least one of the included studies was of high quality. Further, if lack of power was the only reason for rating the quality of the study in question as moderate instead of high, we deducted for imprecision rather than risk of bias.

The optimal information size was computed with a Web-based calculator¹ using an alpha error level of 5% and a statistical power of 80%. The recidivism rate of the control group and a relative risk reduction of 20% were also entered parameters.

The GRADE strength of evidence can be graded in four levels:

Strong scientific evidence $(\oplus \oplus \oplus \oplus)$

Based on high or medium quality studies with no factors that weaken the overall assessment.

Moderately strong scientific evidence $(\oplus \oplus \oplus \circ)$

Based on high or medium quality studies with isolated factors that weaken the overall assessment.

Limited scientific evidence (+++00)

Based on high or medium quality studies containing factors that weaken the overall assessment.

Insufficient scientific evidence (⊕○○○)

Scientific evidence is deemed insufficient when scientific findings are absent, the quality of available studies is low, or studies of similar quality present conflicting findings.

The stronger the evidence, the lower the likelihood that new research findings would affect the documented results within a near future

¹ http://www.dssresearch.com/KnowledgeCenter/toolkitcalculators.aspx